

AMENDMENTS TO THE SPECIFICATION

Please insert the following section heading on page 1, before line 1:

TITLE OF THE INVENTION

Please insert the following section heading and paragraph on page 1, after line 2:

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a 35 U.S.C. § 371 National Stage patent application of International patent application PCT/EP04/004159, filed on April 20, 2004, which claims priority to German patent application DE 10319741.9, filed on April 30, 2003.

Please insert the following section headings on page 1, before line 4:

BACKGROUND OF THE INVENTION

Field of the Invention

Please insert the following section heading on page 1, line 7:

Discussion of the Background

Please insert the following section heading and paragraph on page 2, line 29:

SUMMARY OF THE INVENTION

The present invention relates to a process for improving the printability of paper and paper products when printing with the aid of the ink-jet printing method by treating the paper or the paper products with aqueous solutions of cationic polymers.

Please insert the following section heading on page 2, line 32:

DETAILED DESCRIPTION OF THE INVENTION

Please insert the following section heading on page 6, line 6:

EXAMPLES

Please amend the paragraph beginning on page 6, line 38, as follows:

Polyelectrolyte I: Commercial polydiallyldimethylammonium chloride (~~Catiofast®~~
CATIOFAST® CS from BASF Aktiengesellschaft). The charge density of the polycation measured
at pH 4.5 was 7.9 meq/g.

Please amend the paragraph beginning on page 7, line 7, as follows:

Polyelectrolyte III: Commercial polyamidoamine-epichlorohydrin resin (~~Luresin®~~
LURESIN® KNU from BASF Aktiengesellschaft). The charge density of the polycation measured
at pH 4.5 was 3.5 meq/g.

Please amend the paragraph beginning on page 7, line 36, as follows:

Polyelectrolyte X: High molecular weight polyethylenimine, crosslinked with a
polyethylene glycol dichlorohydrin ether and neutralized with formic acid (~~Catiofast®~~
CATIOFAST® SF from BASF Aktiengesellschaft). The charge density of the polycation measured
at pH 4.5 was 19.0 meq/g.

Please amend the paragraph beginning on page 8, line 5, as follows:

Polyelectrolyte XII: High molecular weight polyethylenimine, neutralized with formic acid
(~~Catiofast®~~ CATIOFAST® PL from BASF Aktiengesellschaft). The charge density of the
polycation measured at pH 4.5 was 19.8 meq/g.

Please amend the paragraph beginning on page 10, line 3, as follows:

10 percent strength aqueous solutions of cationic polyelectrolytes were applied by means of a manual knife coater to a paper which had been provided with 10 g/m² of a coating which corresponded to the prior art and consisted of 100 parts of calcium carbonate, 6 parts of starch, 16 parts of a 50% strength polymer dispersion (~~Styronal~~[®] STYRONAL[®] D 610 from BASF Aktiengesellschaft) and smaller amounts of assistants, so that, after drying, 1.0 g/ m² of the polyelectrolyte remained on the paper. The paper was dried and calendered according to the prior art. Thereafter, the papers were printed by means of the ink-jet printer shown in table 2 with a printed image which comprised black, white and colored script and areas. Relatively small strips which in turn comprised black, white and colored script and areas were cut out of the printed papers in the same parts in each case. These strips were kept in a vessel containing tap water for 30 seconds, said strips being gently agitated for 10 seconds. They were then placed on a blotting paper comprising white untreated cellulose and left to dry. The quality of the printed image and the strike-through of the inks to the back of the paper after the treatment with water were rated as described above with the ratings 1 to 5 and 1 to 3, respectively. The results are listed in table 2.

Please amend the paragraph beginning on page 10, line 25, as follows:

The respective 10 percent strength aqueous solutions of cationic polyelectrolytes shown in table 3 were applied by means of a manual knife coater to a paper which had been provided with 10 g/m² of a coating which corresponded to the prior art and consisted of 100 parts of calcium carbonate, 6 parts of starch, 16 parts of a 50% strength polymer dispersion (~~Styronal~~[®] STYRONAL[®] D 610 from BASF Aktiengesellschaft) and smaller amounts of assistants, so that, after drying, 1.0 g/ m² of the polyelectrolyte remained on the paper. The paper was dried and calendered according to the prior art. Thereafter, the papers were printed by means of the ink-jet printer shown in table 3 with a printed image which comprised black, white and colored script and areas. Relatively small strips which in turn comprised black, white and colored script and areas

were cut out of the printed papers in the same parts in each case. These strips were kept in tap water for 30 seconds, said strips being gently agitated for 10 seconds. They were then placed on a blotting paper comprising white untreated cellulose and left to dry. The quality of the printed image and the strike-through of the inks to the back of the paper after the treatment with water were rated as described above with the ratings 1 to 5 and 1 to 3, respectively. The results are listed in table 3.

Please insert the following section heading on page 13, before line 1:

CLAIMS

Please replace the abstract on page 15 with the attached rewritten abstract.